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ABSTRACT
        Documents and journal articles acquired by the ERIC
Clearinghouses are processed (cataloged, indexed,
abstracted/annotated) for retrieval and use by the educational
community. The bibliographic data resulting from this processing are
provided by the ERIC Clearinghouses on a regular basis to the ERIC
Processing and Reference Facility. The ERIC database is comprised of
two regular bibliographic files containing records for the documents
and journal articles--ED File, ERIC Documents announced in Resources
in Education (RIE) and EJ File, ERIC Journal Articles announced in
Current Index to Journals in Education (CIJE) and a third more recent
and smaller file containing the full-text of brief, highly
concentrated ERIC called Digests--ERIC Digests Online (full-text
records of ERIC Digests). This manual describes the data entry
procedures for these files. In addition, the procedures used for
preparing data for an internal computerized file listing abbreviated
titles of all incoming documents are also described. (CRW)

ERIC

Processing Manual

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

Section IX: Data Entry

June 1992

Educational Resources Information Center (ERIC)
U.S. Department of Education

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LIST OF ILLUSTRATIONS

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SUMMARY OF SIGNIFICANT RULES

1. Clearinghouses must have, at a minimum, an IBM-compatible microcomputer, XT-Level, equipped with a Hayes-compatible, 2400-baud modem, and serviced by a "private" (i.e., non-switchboard) phone line.

2. Clearinghouses must have word processing software such as WordPerfect, WordStar, or Word, and communications software, such as Procomm, Smartcom, or CrossTalk.

3. Bibliographic data for RIE, CIJE, or the EDO and ADR files, must be transmitted in ASCII format, restricted to characters in the official ERIC Character Set, and devoid of special word processing or desktop publishing characters/commands.

4. Bibliographic data for RIE, CIJE, or the EDO and ADR files should normally be transmitted online, but may, alternatively, be transmitted on diskette, if online transmission is not possible for any reason.

5. Bibliographic data for RIE and CIJE must be transmitted weekly. (Each Clearinghouse has been assigned a mutually-agreeable transmission time "window.")

6. All bibliographic data must be spell-checked before transmission to the Facility.

7. The full-text of ERIC Digests must be transmitted during the same week as the corresponding Digest resume is transmitted for RIE.

8. The standard ERIC subfield delimiter is one semicolon followed by a blank. The semicolon retains its normal punctuation function *only* in the Title, Availability, Note, and Abstract fields.

9. When transmitting bibliographic data to the Facility, never end a line with a hyphen, dash, or slash. The ERIC computer system assumes a space between the end of one line and the beginning of another.

10. The Clearinghouse Accession Number (CH_) identifies the beginning of a new record and must, therefore, always be the first field in each record.

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IX. DATA ENTRY

A. Introduction

Documents and journal articles acquired by the ERIC Clearinghouses are processed (cataloged, indexed, abstracted/annotated) for retrieval and use by the educational community. The bibliographic data resulting from this processing are provided by the ERIC Clearinghouses on a weekly basis to the ERIC Processing and Reference Facility, which assembles it for appearance in the printed abstract journals *Resources in Education* (RIE) and *Current Index to Journals in Education* (CIJE) and in their equivalent computerized versions.

The ERIC database is comprised of two regular bibliographic files containing records for documents and journal articles, respectively, and a third more recent and smaller file containing the full-text of brief highly concentrated ERIC Clearinghouse documents called Digests:

- ED File — ERIC *Documents* announced in *Resources in Education* (RIE);

- EJ File — ERIC *Journal Articles* announced in *Current Index to Journals in Education* (CIJE);

- EDO File — ERIC *Digests* Online—the full-text records of ERIC Digests.

In addition, a fourth computerized file, the *Acquisitions Data Report* (ADR) is maintained on a system-wide, but strictly internal basis, for purposes of duplicate checking. This file contains the titles, publication dates, and pagination of documents in various stages of processing at the Clearinghouses for RIE. Unlike the other three files, the brief ADR records are temporary. Entries remain on the ADR file for only a year. The ADR is a means for the decentralized processing components of ERIC to determine what documents are in process throughout the system and, thereby, to avoid duplication of effort. Most documents recorded in the ADR eventually become full-fledged entries in the permanent ERIC database files.

This Section of the EPM covers data entry procedures for all four of the above files.

From time to time, other data in computerized form are requested from ERIC components. These data may include reports or information needed in specific formats, such as WordPerfect, Lotus 1-2-3, etc. These requests typically emanate from Central ERIC, ACCESS ERIC, the ERIC Facility, etc. This Manual does *not* cover data entry procedures or other requirements for such *ad hoc* data requests.

This Section is restricted to the data entry *formats, conventions, and computer activities* involved in recording and transmitting bibliographic data for the ED, EJ, EDO, and ADR files. The intellectual effort involved in creating the content of each of the data fields in the permanent files is described in detail in Sections V through VIII of this *Manual*. Likewise, the intellectual effort involved in creating the temporary ADR file is discussed in detail in Section II.

Before addressing the procedures and conventions used in data entry for the various ERIC files, the hardware (equipment) and software requirements are briefly described.

B. Hardware (Equipment) and Software Requirements

1. Hardware (Equipment) Requirements

Since ERIC data must be prepared using a computer, a system-wide minimum configuration standard for hardware has been established in order to facilitate the transmission of data between ERIC components, especially between the ERIC Clearinghouses and the ERIC Processing and Reference Facility. The basic hardware and software requirements presume that ERIC components will have either a staff member or access to personnel who are knowledgeable in the installation and use of the hardware and software. It is the responsibility of the Clearinghouses to have the required hardware and software along with the personnel trained to use it. Staff at the Facility are available to assist Clearinghouse personnel in order to achieve successful file transmission between the Clearinghouse and the Facility.

ERIC components are contractually required to have, at a minimum, the following equipment:

- Microcomputer, IBM-compatible, XT-level minimum;

- Modem, Hayes-compatible, 2400 baud;

- Phone Line ("Private", i.e., non-switchboard).

a. Microcomputer, IBM-Compatible, XT-Level Minimum

A DOS-based IBM-compatible platform has an extensive availability at a wide variety of prices. Because it has become the standard for most business applications, there is also a large and growing supply of software and related products. Although data will usually be transmitted via the telephone, the configuration also allows for the exchange of data via standard diskettes (5¼" or 3½") whenever necessary. Because of the contractually-established minimum hardware configuration, all computer information or instructions conveyed throughout the network are typically DOS-based.

In recognition of the fact that the hardware in place at Clearinghouse host organizations may vary from the ERIC standard, Clearinghouses internally may choose to use other microcomputers, such as Apple, or even a minicomputer, such as a Prime, to prepare their data. However, Clearinghouses using such hardware will need to be able to convert the data to a DOS-based ASCII (American Standard Code for Information Interchange) format prior to transmission. The use of a non-standard configuration to prepare bibliographic data for the ERIC database does not excuse a Clearinghouse from the requirement to have such a minimum configuration available.

b. Modem—Hayes Compatible, 2400 Baud

A modem is a device that converts the digital signals generated by the computer's serial port to the modulated analog signals required for transmission over a telephone line and, conversely, transforms incoming analog signals to their digital equivalents. Modems are controlled using a standardized set of instructions, the most widely used being the "Hayes," named after the manufacturer whose modems have become the industry standard. The speed of transmission of the data is known as the "baud" rate. Currently, Clearinghouses should have the capability of transmitting data at 2400 baud since the cost of transmitting is reduced when less time is spent online.

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c. **Phone Line (Private)**

Sometimes referred to as a "dedicated" or "private" or "data" line, a private phone line is simply a voice phone line (as found in private residences) that does *not* go through a switching mechanism (i.e., an 8, 9, or other code is *not* required to obtain an outside line). Switching mechanisms can interfere with data during transmission and may introduce erroneous characters or may cause loss of lines of data.

2. **Software Requirements**

a. **Word Processing**

All Clearinghouses are required to have word processing software, such as WordPerfect, Word, WordStar, etc., for use in preparing ERIC data. The software *must* have a spell-check feature which is to be used prior to the transmission of all data. In addition, the software should have a feature to allow the data to either be prepared directly in ASCII format, sometimes referred to as "DOS text" or "non-document" format, or be converted into ASCII format from a "document format." Clearinghouses working with something other than DOS-based software must still meet the requirement for spell-checking and conversion of data.

b. **Communications**

To facilitate the transmission of data, all Clearinghouses are required to have communications software such as Procomm, Procomm Plus, Smartcom, CrossTalk, etc.

C. **General Guidelines/Rules for the Preparation and Transmission of Data**

All ERIC data transmitted by Clearinghouses must adhere to the following general rules:

1. Data must be transmitted in ASCII format. Data prepared in ASCII, sometimes referred to as "non-document" or "DOS text," are devoid of commands to a printer, bold or italics commands, bullets, tabs, etc.

2. Data prepared on a word processor in "document" mode must be converted to ASCII in order to remove non-ASCII characters.

3. Data must start at position 1 at the left margin.

4. Underlining may not be used anywhere in the text, *except* as part of the field tag.

5. Line length may not exceed 80 characters including spaces. To ensure this length, margins should not be set using the "inch" setting found in desktop word processors; instead, select a "fixed spacing" setting. A right margin setting of 75 is recommended.

6. Single spacing is *always* used; do not double or triple space between lines or resumes.

7. Use a "Hard" line feed at the end of each line; that is, do not use the "wrap" or "soft return" feature found in word processing. During computer processing, the program searches for the "Hard" line feed to determine when to go to the next line. Without the proper feed, the program will drop data that exceeds the 80 character limitation.

8. Hyphens, dashes, and slashes should not end a line.

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9. Do not use more than one space between words or after punctuation such as colons or periods.

10. Do not prepare data using proportional spacing of characters.

11. Do not justify the right margin.

12. Begin each new field on a separate line.

13. Use *only* characters listed in the ERIC Character Set (see **Figure IX-1**).

D. RIE/CIJE Resumes

1. Definitions

a. Resume

A resume is a complete surrogate record for a document or journal article. A complete record consists of the descriptive bibliographic data (title, pagination, author, etc.), indexing data, and an abstract/annotation describing the item in succinct narrative form. (Figures IX-2A-B display completed RIE and CIJE resumes.) All new resumes submitted by the ERIC Clearinghouses are identified initially by the Clearinghouse Accession Number. The ERIC computer system considers a resume to consist of all fields following the identifying Clearinghouse Accession Number (CH_) and preceding the next CH_.

b. Field

Within these resumes are elements of data called "fields" (e.g., title, author, contract number, abstract, etc.). An ERIC resume may have up to 24 possible data fields, although not all fields are keyed by the Clearinghouse nor would all fields be appropriate for any given resume. Each field within a resume is identified by its own unique keyword. A keyword is the "tag" which indicates the beginning of a new field. Each keyword is entered in all capital letters followed by an underscore (a character the text may not have). The complete set of all possible ERIC fields, their keywords, and whether they are provided by the ERIC Clearinghouse or the ERIC Facility, are shown alphabetically in **Figure IX-3**.

Some fields are designated *mandatory;* the data for these fields *must* be present in all RIE and/or CIJE resumes. Non-mandatory fields are called "optional" and are used when the document exhibits them. In some instances the data for the mandatory fields are provided by the Clearinghouse and in others, by the Facility. If the field is mandatory for only RIE or only CIJE, it is so noted. The *mandatory* fields in the above list are designated by bold, italicized type.

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ALL ALPHABETICS	.	A-Z (UPPER CASE)
ALL ALPHABETICS	-	a-z (LOWER CASE)
NUMERICS	-	0-9
SPECIAL CHARACTERS	-	(LISTED BELOW)

&	AMPERSAND		>	GREATER THAN
'	APOSTROPHE		<	LESS THAN
*	ASTERISK		-	HYPHEN
	BLANK SPACE		(	PARENTHESIS (LEFT)
[	BRACKET (LEFT)		)	PARENTHESIS (RIGHT)
]	BRACKET (RIGHT)		%	PERCENT
:	COLON		.	PERIOD
,	COMMA		+	PLUS SIGN
--	DASH (TWO HYPHENS)		#	POUND SIGN
$	DOLLAR SIGN		?	QUESTION MARK
=	EQUALS		"	QUOTATION MARK
!	EXCLAMATION POINT		;	SEMICOLON
			/	SLASH, VIRGULE

FIGURE IX-1:   **ERIC Character Set**

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Shipment of 3-6-92 contains 33 RIE resumes
CH_CE059687
PDAT_88
LEVEL_1
TITLE_Bulletin Board Ideas.
INST_BBB06627=South Carolina State Dept. of Education, Columbia.
Office of Vocational Education.
PUBTYPE_052
GOV_State
GEO_U.S.; South Carolina
AUD_Teachers
DESC_*Home Economics; *Career Planning; Secondary Education;
Art Materials; *Bulletin Boards; Occupational Home
Economics; Student Motivation
ABST_This document consists of bulletin board ideas for high
school home economics classrooms. The first section contains 19
themes for bulletin boards. Each page contains the name of the
theme, needed materials and supplies, and an illustration of the
bulletin board. Themes include the following: home economics
occupations, motivational materials, units of instruction,
humorous materials, career planning ideas, and learning styles.
The second section contains one brochure and six posters on home
economics as a career. (NLA)
CH_CE059799
PDAT_91
LEVEL_1
TITLE_Rediscovering Our National Vision: Building Positive
Self-Esteem and a Strong Work Ethic.
INST_BBB26778=National Council on Vocational Education,
Washington, DC.
PUBTYPE_120
GOV_Federal
GEO_U.S.; District of Columbia
DESC_*Self Esteem; *Work Ethic; *Productivity; Job Satisfaction;
Self Motivation; Parent Child Relationship; Student School
Relationship; Employer Employee Relationship; Skill Development;
Elementary Secondary Education; Educational Objectives; Values;
Social Responsibility; *Entry Workers; *Family Influence; School
Role
ABST_The National Council on Vocational Education (NCVE)
determined what competencies are required for entry-level workers
and identified the educational requirements needed to train the
work force. A common theme emerged: the most desirable and
successful employees were those having a positive attitude toward
work--a strong work ethic. Positive self-esteem fosters a
positive work ethic. Individual levels of self-esteem fluctuate,
depending on one's familiarity, comfort, and training. NCVE's
Working Committee studied the role of parents, educators, and
employers and recommended how they might have a more positive
impact on young workers. They also examined ways that students
can help themselves. The committee recommended that parents and
educators find ways to reduce failure among children in their
care. The family provides the base for caring and nurturing and
is the place where personal values and social responsibility are
internalized. A comprehensive plan must integrate the resources
of family, school, workplace, and community to encourage the
highest skill, quality, and productivity in the workplace.
(Sections for parents, educators, students, and employers contain
summary steps to follow for attaining a strong work ethic.
Members of NCVE, the Work Ethic/Self-Esteem Committee members,
and 57 references are included.) (NLA)

FIGURE IX-2A: Completed Resumes Keyed For Online Transmission
   A. RIE Resume

```
Shipment of 3-6-92 contains 25 CIJE resumes
CH_CE523333
TITLE_Women's Education in India: Problems and Prospects.
AUTH_Reddy, M. C. Reddeppa
JNL_Convergence; v24 n4 p35-41 1991
AVAIL_UMI
PUBTYPE_120
DESC_*Womens Education; Foreign Countries; *Illiteracy; *Sex
Discrimination; *Sex Role; Attitudes; *Equal Education
IDEN_*India
ABST_Problems in educating women in India include social taboos,
dependency, parents' discriminatory attitudes, low social status,
early marriage, heavy work load, lack of motivation, and family
poverty. Changes in attitudes, laws, and funding are needed to
expand opportunities. (SK)
CH_CE523336
TITLE_Education and Training for a Competitive Workforce: Overview.
AUTH_Auerbach, James A.
JNL_Looking Ahead; v13 n1-2 p2-7 Jul 1991; oneshot
PUBTYPE_070
DESC_*Labor Force Development; *On the Job Training;
Technological Advancement; *School Role; *Education Work
Relationship; College Preparation; Cultural Pluralism; *Skilled
Workers; *Productivity
REPNO_ISSN-0747-525X
NOTE_Available from National Planning Association, 1424 16th
Street, NW, Washington, DC 20036.
ABST_On-the-job training is responsible for more increases in
productivity than technological change or formal education; yet
employer investment in training remains small. Although
three-fourths of all jobs will not require a college degree,
schools continue to focus on preparing students for college.
(SK)
```

FIGURE IX-2B: Completed Resumes Keyed For Online Transmission
         B. CIJE Resume

FIELD NAME	IDENTIFYING KEYWORD (TAG)	DATA PROVIDED BY
Abstract/Annotation	*ABST_*	*CH*
Author	AUTH_	CH
Availability (Other than EDRS)	AVAIL_	CH
Clearinghouse Accession Number	*CH_*	*CH*
Contract/Grant Number	CONT_	CH
Descriptive Note	NOTE_	CH
Descriptors	*DESC_*	*CH*
EDRS Price (RIE Only)	*PRICE_*	*FAC*
ERIC Accession Number (ED/EJ)	*ACC_*	*FAC*
Geographic Source (RIE Only)	*GEO_*	*CH*
Governmental Status	GOV_	CH
Identifiers	IDEN_	CH
Institution (Preparing Document)	INST_	CH
Issue (of Abstract Journal)	*ISS_*	*FAC*
Journal Citation (CIJE Only)	*JNL_*	*CH*
Language	*LANG_*	*CH/FAC*
Level of Availability (RIE Only)	*LEVEL_*	*CH*
Pagination (RIE Only)	*PAGE_*	*FAC/CH*
Publication Type	*PUBTYPE_*	*CH*
Publication Date	*PDAT_*	*CH*
Report Number	REPNO_	CH
Sponsoring Agency	SPON_	CH
Target Audience	AUD_	CH
Title	*TITLE_*	*CH*

FIGURE IX-3: RIE/CIJE DATA FIELDS, KEYWORDS, AND DATA PROVIDER

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c.   **Subfield**

Certain fields may be subdivided, either into different kinds of sub-elements or into multiple instances of the same type of data. For example, the Personal Author field may be subdivided into two personal authors, the Contract/Grant Number field into multiple contract numbers, etc.

```
AUTH_Smith, John D.; Johnson, Jane
CONT_400-80-1234; RI880045
```

The fields which may be subdivided are:

```
AUD; AUTH; CONT; DESC; GEO; IDEN; INST; JNL;
LANG; PUBTYPE; REPNO; SPON
```

NOTE: Subfields within a field are always separated or "delimited" by a semicolon followed by a blank. Except in the Title, Availability, Note, and Abstract fields, the semicolon is the standard ERIC subfield delimiter.

2.   **Specific Field Formats**

The fields in the discussion that follows are listed and described in the order in which they should generally be entered on the resume by the Clearinghouse. (The fields that are added by the Facility staff, and/or automatically by the ERIC computer program, are listed at the end of this discussion.) The intellectual content of each of these fields is described in detail in Sections V through VIII of the EPM. Typically, following the Clearinghouse Accession Number (which always must come first), the fields containing descriptive bibliographic data such as Title, Author, Journal, etc. are keyed, followed by the fields containing indexing data (e.g. Descriptors, Identifiers, etc.), which are then followed by the lengthy Abstract field. To prevent the accidental omission of a field and to facilitate proofing by the Clearinghouse, all resumes should follow this general sequence.

NOTE: Data is always entered *immediately* after the underscore; do not leave any space between the underscore "_" and text. Use only one underscore.

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a.   **Clearinghouse Accession Number (CH_)**

A Clearinghouse Number consists of a two-character alphabetic prefix (each Clearinghouse is assigned one), followed by 6 numeric characters; it is assigned by the Clearinghouse, usually from a log, and must be unique to each document/article/resume entering the ERIC database. Every resume *must* start with a Clearinghouse Accession Number. *It is a mandatory field and must always be the first field keyed.* Key the number without spaces as shown below:

```
CH_CE123456
```

Of all of the fields in the resume, the Clearinghouse Accession Number is the field that it is most important to key correctly and to have match exactly with the corresponding number on the document/journal article. *Any error detected after transmission should be immediately reported to the Facility.* Ideally the Clearinghouse Accession Numbers should be proofed after keying, but before transmission, against the matching document[1] The most common errors made in this field are:

- keying the letter "O" instead of the numeric "0";
- keying the letter "l" instead of the numeric "1";
- transposing numbers;
- keying from a CIJE number range (typically 500000) instead of the proper RIE range, or vice versa;
- keying a hyphen instead of the underscore following the Clearinghouse prefix.

b.   **Publication Date (PDAT_)**

Key the publication date of the document in only one of the following formats:

```
PDAT_5Sep91
PDAT_30Sep91
PDAT_Sep91
PDAT_91
PDAT_[91]
```

This is a mandatory field. No other variations (e.g., Spr, Aut, Win, Sept, Sep 5 91, 91Sep, etc.) are permissible. Do not leave blanks or supply zeros for missing information. Use only the following three-character abbreviations for the months:

```
Jan  Feb  Mar  Apr  May  Jun
Jul  Aug  Sep  Oct  Nov  Dec
```

---

[1] Except where specifically indicated, whenever "document" is used the statement also pertains to journal articles.

The bracketed date is used *only* when the publication date has been supplied by the cataloger based on indirect evidence in the document or on accompanying documentation.

c.   **Level of Availability (LEVEL_)**

Every document is assigned a Level number indicating its availability from EDRS. *This is a mandatory field for RIE only.* Key a single digit Arabic number to reflect this availability, as shown below:

LEVEL-1	Document available from EDRS in paper copy and microfiche.
LEVEL_2	Document available from EDRS only in microfiche.
LEVEL_3	Document not available from EDRS.

The digit in the Level field should agree with the Level recorded on the Logsheet that accompanies the documents when they are shipped to the Facility (see Section IV).

d.   **Personal Author (AUTH_)**

Personal authors are cataloged in accordance with the rules provided in Section V of the EPM. Entries for the Author field are exemplified by the five types below:

(1)   **Single Author**

```
AUTH_Smith, David
AUTH_Cahn-Casden, Martha
AUTH_Rodriguez, Roberta J.
AUTH_O'Donnell, T. Donald
AUTH_Weiser, Kathleen McCabe
AUTH_Johnson, Bobbie-Sue
AUTH_Masaka, L. T.
AUTH_Thompson, Matthew P., III
AUTH_Brown, Henry K., Jr.
```

(2)   **Two Authors**

```
AUTH_DuBarry, Samantha T.; Adams, P. James
```

(3)   **Three or More Authors**

```
AUTH_Franklin, Gregory B.; And Others
```

(4)   **Editor or Editors**

```
AUTH_Chinn, Carole Ann Robertson, Ed.
AUTH_Zane, Ben M., Ed.; Simon, J. T., Ed.
```

(5)   **Compiler or Compilers**

```
AUTH_MacDonald, Arthur, Comp.
AUTH_Horning, Jenny, Comp.; Lee, Jon, Comp.
```

Hyphens and apostrophes may be used as appropriate (e.g., O'Toole, Mary-Louise). Parentheses and double quotes may not be used in the field.

Brackets "[ ]" may not be used to indicate a supplied author's name.

e.   **Document Title (TITLE_)**

After selecting the appropriate title in accordance with EPM guidelines, key the Title (up to 500 characters) as follows:

```
TITLE_Career Education for Women.
```

This is a mandatory field. Titles must always end with a punctuation mark (period, question mark, or exclamation point). If no Title can be found and one is fabricated by the cataloger, enclose the entry in square brackets "[ ]":

```
TITLE_[Career Education for Women.]
```

For additional examples illustrating many variations, such as subtitles, edition and report statements, series titles, multi-volume titles, non-English language titles, conference proceedings, papers, Congressional hearings, etc., see the Title discussion in the EPM's Section V ("Cataloging").

f.   **Institution/Corporate Author (INST_)**

The Institution field contains the name of the organization responsible for preparing the document. Using the guidelines in the EPM and the ERIC *Source Directory*—an authority list of more than 33,000 organization names, a cataloger selects the appropriate name(s) and its corresponding Source Code. The Code is used by the computer program to generate the "translation," i.e., the standard accepted way of recording the organization name. All Codes have a prefix consisting of three alphabetical letters followed by five numerics. The keyed entry would appear as follows:

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(1)   **Single Institution**

```
INST_BBB00000=Name of Institution
```

(2)   **Two or More Institutions**

```
INST_BBB00000=Name of Institution;
EYV38140=International Reading Association,
Newark, Del.
```

Note that the semicolon delimiter *must* be used in this field to separate multiple individual entries.

If the institution name needed is not listed in the *Source Directory*, or if the correct Source Code cannot be identified, the Source Name should still be entered, preceded only by an equal sign:

(3)   **Single Institution, Code Not Located in Authority List**

```
INST_=Maryland State Dept. of Education,
Annapolis. Dept. of Research and Evaluation.
```

(4)   **Two or More Institutions, Codes Not Located in Authority List**

```
INST_=Maryland State Dept. of Education,
Annapolis. Dept. of Research and Evaluation.;
=Maryland State Dept. of Mental Health,
Annapolis.
```

This format alerts the ERIC Facility that a new Source Code may need to be created and added to the authority list.

If there are several different institutions involved, one which appears in the *Source Directory* (i.e., already has a Code established) and one which needs a new Code created, the entry format would be:

```
INST_FGK56700=National Education Association,
Washington, D. C.; =Ohio State Literacy
Council, Columbus.
```

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or, in reverse order:

```
INST_=Ohio State Literacy Council, Columbus.;
FGK56700=National Education Association,
Washington, D.C.
```

The order of the names within the field is immaterial. Keep in mind that the keyword INST_ is only keyed once for the entire group of institutions.

Codes should be keyed carefully as an error will generate an incorrect name in the field (if the error happens to match an existing Code) or it will be flagged by the computer if the format is in error. To help ensure that the Code requested is the actual name desired, the Code along with the equal sign and its translation is required. When the field is processed, the computer translation as well as the name intended by the Clearinghouse will appear, thus providing a double-check.

The most common errors in this field are:

- the transposing of letters and/or numerics in the Code; and

- the use of the letters "O" and/or "l" for the numeric "0" (zero) and/or "1" (one).

Because the data in an entry for a new name will be used to establish the new Code and its translation in the authority list, the format of the proposed new name should follow as much as possible the guidelines for Institution names found in the Appendix to Section V of the EPM. The data for existing names do not need to be quite as exact since the Code used will generate the name from the *Source Directory* authority list.

g.   **Sponsoring Agency (SPON_)**

The Sponsoring Agency is defined as the organization (other than the corporate source) that provided funds supporting the work or production of the document. The format as well as the general guidelines for this field are the same as that described for the Institution field (INST).

(1)   **Single Sponsoring Agency**

```
SPON_EDD00001=Department of Education,
Washington, DC.
```

(2)   **Two or More Sponsoring Agencies**

```
SPON_EDD00036=Office of Educational Research
and Improvement (ED), Washington, DC.;
BBB13494=National Science Foundation,
Washington, D.C. Directorate for Science
Education.
```

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h.   Contract/Grant Number (CONT_)

The Contract/Grant Number field contains specific alphanumeric identifier(s) assigned by a sponsoring agency to designate the financial support given the work or research supported in the document. It contains contract numbers, grant numbers, cooperative agreement numbers, or other procurement-related numbers. Key these numbers as follows:

(1)   Single Number

```
CONT_RI88062013
CONT_G008635376
CONT_400-80-0031
```

(2)   Two or More Numbers

```
CONT_RI88062013; MDR-885-0560; 400-79-0045
```

The semicolon is used as the standard subfield delimiter for this field. Blank spaces in contract numbers should be replaced with a hyphen.

i.   Report Number (REPNO_)

Report Numbers should be keyed matching as closely as possible with the form appearing on the document. However, wherever a space appears in the number on the document, insert a hyphen to assure uniformity in sorting; *do not leave a blank* space. Separate multiple entries by a semicolon and a blank.

(1)   Single Numbers

```
REPNO_NCES-91-118
REPNO_ISBN-0-86397-133-4
REPNO_ISSN-0282-7522
```

(2)   Two or More Numbers

```
REPNO_ISBN-0-86397-133-4; ISSN-0282-722;
ETS-TR-91-34
```

If a document contains several reports, each with a separate report number but in a sequential series, the numbers should each be entered:

```
REPNO_ETC-TR-404; ETC-TR-405; ETC-TR-406
```

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Do *not* use agglomerating formats, e.g.:

```
REPNO_ETC-TR-404 thru ETC-TR-407
or
REPNO_ETC-TR-404-406
```

As always, care should be taken to differentiate between the letters "O" and "l" and the numbers "0" (zero) and "1" (one); this is particularly important when recording ISBN data (i.e., all data following the prefix are numeric).

j.   Publication Type (PUBTYPE_)

The Publication Type field describes the type of document in hand using a 3-digit numeric code. Up to a maximum of three codes may be assigned to this field, but three are rarely needed. The codes and their translations are shown in **Figure-IX-4.** *This is a mandatory data element for both RIE and CIJE.*

Typical entries would appear as:

(1)   Single Publication Type Code

```
PUBTYPE_052
PUBTYPE_141
```

(2)   Two or More Codes

```
PUBTYPE_052; 022; 171
```

In CIJE data only, the Publication Type Code, "080", designating a journal article, is not to be keyed as it is added *automatically* by the computer to all CIJE records.

k.   Descriptive Note (NOTE_)

Entries in the Note field provide miscellaneous information extending the description of the document. (Section V of the EPM provides guidelines for notes concerning conference papers, speeches, theses, related documents, analytics, marginal legibility, etc.) Typical entries would appear as follows:

```
NOTE_Paper presented at the Annual Meeting of
the National Art Education Association (30th,
Kansas City, MO, April 5-9, 1990).
```

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ERIC Publication Types

Code	Publication Type

010   BOOKS

COLLECTED WORKS
020   — General
021   — Conference Proceedings
022   — Serials

030   CREATIVE WORKS (Literature, Drama, Fine Arts)

DISSERTATIONS/THESES
040   — Undetermined
041   — Doctoral Dissertations
042   — Masters Theses
043   — Practicum Papers

GUIDES
050   — General (use more specific code, if possible)
       — Classroom Use
051   — Instructional Materials (For Learner)
052   — Teaching Guides (For Teacher)
055   — Non-Classroom Use (For Administrative & Support Staff, and for Teachers,
       Parents, Clergy, Researchers, Counselors, etc. in Non-Classroom Situations)

060   HISTORICAL MATERIALS

070   INFORMATION ANALYSES (State-of-the-Art Papers, Research Summaries,
       Reviews of the Literature on a Topic)

071   — ERIC Information Analysis Product (IAP's)
072   — Book/Product Reviews
073   — ERIC Digests (Selected) in Full Text

080   JOURNAL ARTICLES

090   LEGAL/LEGISLATIVE/REGULATORY MATERIALS

100   AUDIOVISUAL/NON-PRINT MATERIALS
101   — Computer Programs
102   — Machine-Readable Data Files (MRDF)

110   STATISTICAL DATA (Numerical, Quantitative, etc.)

120   VIEWPOINTS (Opinion Papers, Position Papers, Essays, etc.)

REFERENCE MATERIALS
130   — General (use more specific code, if possible)
131   — Bibliographies/Annotated Bibliographies
132   — Directories/Catalogs
133   — Geographic Materials/Maps
134   — Vocabularies/Classifications/Dictionaries

REPORTS
140   — General (use more specific code, if possible)
141   — Descriptive (i.e. Project Descriptions)
142   — Evaluative/Feasibility
143   — Research/Technical

150   SPEECHES, CONFERENCE PAPERS

160   TESTS, EVALUATION INSTRUMENTS

170   TRANSLATIONS
171   — Multilingual/Bilingual Materials

FIGURE IX-4:   Publication Types

Some entries, such as for conference papers, have an established standardized format that should be followed (e.g., insertion of the number, location, and date of conference within parentheses following the name; use of postal abbreviations for U.S. state names) while other entries are document-dependent, with brevity and succinctness being the main criteria.

NOTE: For CIJE data only, the Note field is also used for citing publisher address and availability information for relatively obscure journals:

> NOTE_Journal publisher: Chemical Manufacturers Association, 2501 M Street, NW, Washington, DC 20037.

1.   **Availability (AVAIL_)**

This field provides information on the availability of documents from sources other than EDRS. *For documents not available from EDRS (i.e., Level 3 items), this field is mandatory.* For documents available from EDRS, the field is used to cite alternate sources of availability, when known. A typical entry would appear as:

> AVAIL_National Catholic Educational
> Association, Suite 100, 1077 30th Street, N.W.,
> Washington, DC 20007-3852; (Stock No. 3533,
> $15).

Do *not* use a leading phrase such as "Available from...," "Paper copy available from," as the computer system automatically inserts the phrase "Available from..." in front of all RIE Availability field entries.

When completed, the field should contain the following information:

- Full name of the source of the document;

- Complete address, including the street number or post office box number;

   — For U.S. sources, use the postal abbreviations for the states;

   — For U.S. addresses, use the 5 or 9 digit zip code;

   — For non-U.S. addresses, the postal codes may be a combination of alphanumerics; record those exactly as found, including spaces;

- Catalog, Stock or Order Number, when appropriate;

- Do *not* use the cent (¢) sign as it is not in the ERIC Character set;

- Price of the document (in parentheses).

Documents available from Federal agencies typically require only the agency's name, city, state, and zip code. For example:

```
AVAIL_Superintendent of Documents,
Congressional Sales Office, U.S. Government
Printing Office,  Washington, DC 20402.
```

NOTE: *For CIJE data only,* this field is restricted to:

```
AVAIL_UMI
```

which is converted automatically by the computer system to the phrase "Reprint available: UMI".

m.   **Journal Citation (JNL_)**

If an item is a journal article (as would be announced in CIJE) or if an item is a theme issue of a journal that can be announced in RIE, the Journal Citation field is used to identify the specific journal. A typical entry would be:

```
JNL_Childhood Education; v67 n3 p194-97 Spr
1991
```

The format of the data should be the journal title (unabbreviated) in the first subfield, followed by a semicolon and a space. The second subfield contains the volume number, issue number, inclusive pagination, and date, in that order. Note:

- Numerics are always cited in Arabic numerals; do *not* use Roman numerals;

- Inclusive pagination may drop the repetitive digit for the last page;

- Abbreviate the months of the year using the standard 3-character representations:

Jan	Feb	Mar	Apr	May	Jun
Jul	Aug	Sep	Oct	Nov	Dec

- Other abbreviations used are:

volume	v	number	n
page(s)	p	special issue	spec iss
Spring	Spr	Summer	Sum
Fall	Fall	Winter	Win

This is a mandatory field for CIJE only.

n. **Pagination (PAGE_)**

This *mandatory* field is omitted by ERIC Clearinghouses except for Level 3 documents, for which it is mandatory. For Level 1 and 2 documents the field is added by the Facility after the documents have been paginated for EDRS filming purposes. For Level 3 documents, key the number of pages without punctuation (period, commas, or p's) as follows:

```
PAGE_1045
```

o. **Language (LANG_)**

The language of the document is entered in this field. Because the vast majority of documents entering the database are in English, this field has an automatic "default to English" feature when left blank (i.e., when no field is present, the computer will automatically generate "LANG_English").

For non-English or bilingual documents in which English is one of multiple languages, the field *must be keyed and is mandatory*. Examples are:

(1) **English Only**

```
                    Do not key field; leave blank
```

(2) **Non-English**

```
    LANG_French
```

(3) **Two or More Languages**

```
    LANG_English; Spanish
    LANG_Spanish; Hmong; English
    LANG_French; German
```

The languages entered in the field should correspond exactly in spelling and format to those found in the Language Authority List (see Figure-IX-5). This list, which contains all of the principal languages, is based upon the ERIC *Thesaurus* and *Identifier Authority List* (IAL). If a language does not appear on the Language Authority List, use the language as it appears in either the *Thesaurus* or the *IAL*.

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p.   **Geographic Source (GEO_)**

The Geographic field is intended to indicate the country of origin. *It is a mandatory field only for RIE.* For English-speaking countries (United States, Canada, United Kingdom, Australia), which provide the bulk of ERIC documents, the field has an added subfield for the state or province level. (The lengthy "Geographic Names Authority List" appears in Section V—"Cataloging" and is not repeated here.)

Same typical entries are:

```
GEO_U.S.; Kentucky
GEO_Canada; Alberta
GEO_United Kingdom; England
GEO_Australia; Queensland
GEO_France
```

The semicolon is used as a standard subfield delimiter for this field. The abbreviation for the United States is "U.S." and is keyed with no spacing between the "U." and the "S." The entry is limited to one country only.

q.   **Target Audience (AUD_)**

This data element identifies the intended educational community to which a document or article is aimed *if and when* that population is specifically identified by the document. Entries in this field are limited to the eleven defined audiences found in the "Target Audience Authority List: Administrators, Counselors, Community, Media Staff, Parents, Policymakers, Practitioners, Researchers, Students, Support Staff, and Teachers. The field uses the semicolon as a standard subfield delimiter. Examples of entries are:

(1)   **One Type of Audience**

```
AUD_Teachers
```

(2)   **Two or More Types of Audience**

```
AUD_Parents; Students; Teachers
```

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Afrikaans	Guarani	Kituba	Quechua
Albanian	Haida	Korean	Rumanian
Aleut	Haitian Creole	Kpelle	Russian
Arabic	Hausa	Lao	Samoan
Armenian	Hawaiian	Latin	Seminole
Assyrian	Hebrew	Malay	Seneca
Athapascan	Hindi	Malayalam	Serbocroatian
Belizean Creole	Hmong	Mandingo	Setswana
Bengali	Hualapai	Mandinka	Singhalese
Cambodian	Huichol	Mano	Siswati
Chinese	Hungarian	Marathi	Soninke
Choctaw	Hupa	Mende	Spanish
Cree	Igbo	Mohawk	Susu
Czech	Ilocano	Muskogee	Swahili
Danish	Indonesian	Navajo	Swedish
Dari	Inupiaq	Nepali	Tagalog
Dibabawon	Irish	Norwegian	Thai
Dutch	Italian	Ojibwa	Tlingit
Edo	Japanese	Palauan	Turkish
English	Jukun	Panjabi	Ukranian
Ewe	Kabiye	Passamaquoddy	Vietnamese
Finnish	Kalinga	Persian	Wolof
French	Kanuri	Pima	Yoruba
Fulfulde	Karuk	Polish	Yupik
German	Khowar	Portuguese	Yurok
Greek	Kiribati	Pulaar	

FIGURE IX-5:   **Language Authority List**

(3)   No Target Audience

<u>Omit the field altogether.</u>

One Target Audience group, "Practitioners," has subgroups (Administrators, Teachers, Counselors, Media Staff, and Support Staff). When one or more of these subgroups appears in the field, the computer will automatically insert the more generic "Practitioners" in the field.

Note that "Policymakers" is one word; do not enter in the separated form "Policy Makers."

r.   **Governmental Status (GOV_)**

This field is intended to indicate whether the document is a publication of a governmental agency (Federal, State, County, City) in the United States and its territories or of a foreign/international agency. Only one of the following entries may be used at any one time. This field is not used in CIJE. Examples are:

```
GOV_Federal
GOV_State
GOV_Local
GOV_Foreign
Gov_International
```

s.   **Descriptors (DESC_)**

This field contains subject index terms, as found in the *Thesaurus of ERIC Descriptors*. <u>*This is a mandatory field and at least one major Descriptor must be entered in the field.*</u>   Follow the format and the spelling exactly as found in the *Thesaurus*. Precede major Descriptors by an asterisk, as indicated in the example below. Separate Descriptors with a semicolon and a space. No particular order is required and major Descriptors need not precede minors. Key Descriptors with the first letter of each word capitalized. Acronym-type Descriptors are entered in all upper case, e.g., FLES. Do not capitalize articles, prepositions, and conjunctions in the Descriptors unless they appear as the first word.

Spacing of Descriptors <u>must</u> conform precisely to that in the ERIC *Thesaurus*, e.g. "Postsecondary," *not* "Post Secondary." A sample Descriptor field would be:.

```
DESC_*Career Opportunities; *Career Planning;
*Demand Occupations; Employment Opportunities;
Females; *Working Women; Vocational Counseling;
Postsecondary Education
```

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t.   Identifiers

Identifiers are semi-controlled indexing terms. Terms entered in this field should either follow the format and spelling of Identifiers found in the *Identifier Authority List* (IAL) or, if a new Identifier needs to be created, should follow the format and conventions listed in Section VIII-Part 2 of the EPM.

The basic rules are:

- Identifier entries cannot exceed 50 characters (including spaces but excluding the asterisk).

- No special characters are permitted except parentheses.

- No more than two Identifiers may be asterisked as major terms.

- Separate multiple Identifiers with a semicolon and a space.

There is no requirement for any particular order. A sample Identifier field would be:

```
IDEN_*America 2000; *National Assessment of
Educational Progress;  National Tests; Illinois
```

u.   Abstract/Annotation (ABST_)

The Abstract field contains a succinct, preferably informative, description of the document. *For RIE it is a mandatory field.* Except for certain kinds of documents, abstracts are limited to approximately 200 words. Annotations for CIJE are also entered in this field; they are not mandatory, but are strongly recommended. Annotations are limited to approximately 50 words.

The following rules govern the keying of Abstracts/Annotations:

- Do not end a line with a hyphen (-), slash (/), or dash (--).

- Stay within the established word limit. Abstracts that are only slightly longer will generally not be modified, but those which are considerably longer may be shortened by the Facility editors. Table-of-Contents type abstracts, which may, for example, be used to list titles and authors from a conference proceedings, may exceed the 200 word limit, but may not go beyond approximately 43 lines in length (in order not to be truncated in RIE).

- Do not use the underline, superscripts, subscripts, accent symbols, etc. (See EPM Section V for guidance on how to create substitutes for these characters.)

- Key the abstract as one complete paragraph.

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3. ERIC Facility Data Entry

Following receipt at the Facility of data from the Clearinghouses, several additional fields are added automatically by the ERIC computer system. These fields are fully described in Section V of this Manual ("Cataloging") and are listed below for information purposes only:

a. Issue of Abstract Journal (ISS_)

The computer enters the date of the abstract journal issue in which the resume will be announced, e.g RIEJAN92; CIJJAN92.

b. Pagination (PAGE_)

ERIC defines "Pagination" as the number of microfiche frames necessary to photographically record the entire item. Following pagination (and frame-by-frame number stamping) of the Level 1 and Level 2 documents at the Facility, the page count is added to each resume. NOTE: Clearinghouses must provide this data for Level 3 documents, since such documents are not filmed and therefore not sent to the Facility.

c. EDRS Price (PRICE_)

The content of this field is calculated by the computer on the basis of the LEVEL and PAGE fields. Both fields must be present in order to do this.

d. ERIC Accession Number (ACC_)

The ED/EJ Accession Numbers are added sequentially to the record by the ERIC computer system, *after* all duplicates and other problem documents/articles have been removed, and just before the edited records for a particular issue (which have been sorted by Clearinghouse number) are added to the ERIC master file. ERIC final accession numbers are assigned without any gaps and for this reason cannot be determined in advance before the removals have been accomplished.

4. Data Preparation and Transmission

a. Preparation

Depending on the internal organization of an ERIC Clearinghouse, the resumes for RIE and/or CIJE are either keyed directly onto the computer by the abstractors/indexers/catalogers or are keyed by a secretary. It is recommended that data be keyed directly in ASCII format; if the data is keyed in the so-called "document" format, such as is found in desktop publishing software where various printer commands, etc., are inserted, the data must be converted to ASCII format and the printer commands deleted prior to transmission.

b. What Should Be Transmitted

The RIE/CIJE resumes transmitted should correspond with the RIE documents and CIJE logsheets to be shipped later in the same week to the Facility. It is recommended that the file transmitted to the Facility specify the number of RIE and CIJE records contained in the transmission (see Figure-IX-2(A-B)).

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c.   **Proofing**

Clearinghouse Accession Numbers should always be proofed against the document/article accession numbers. Resumes should be arranged in numerical order by Clearinghouse Accession Number. RIE and CIJE resumes should be kept as two separate and distinct groups; do *not* intermix RIE/CIJE records. All resumes should undergo a final check to be certain that all mandatory fields are present. Resumes should be spell-checked prior to transmission.

It is recommended that Clearinghouses add the ERIC keywords to their word processing dictionary so that any errors in these fields will be detected. Keywords should be carefully checked to ensure there has been only one occurrence per resume. For example, a very common error is for a keyword such as "DESC" to be keyed twice, with the second occurrence used, in error, for the Abstract field. When a keyword is keyed twice in the same resume, the data in the first occurrence will be overlaid by the data in the second occurrence during computer processing, thereby wiping out the data in the first occurrence. If the second occurrence contains more data than that allowed by the field, the data may be truncated or discarded as "illegal" by the computer.

d.   **Transmission Schedule**

On a weekly basis, Clearinghouses must transmit to the Facility resumes for both RIE and CIJE. Because of variations in telecommunication setups at the Clearinghouses, each Clearinghouse has a mutually-agreed-upon time for transmission. If a Clearinghouse, for whatever reason, must abstain from a transmission, the ERIC Facility should be contacted.

e.   **Data Errors Detected after Transmission**

If a major error in a resume is detected after transmission (e.g., incorrect Clearinghouse Accession Number, wrong abstract, etc.), the Facility should be immediately contacted by phone or FAX so that the error can be corrected before the data undergoes computer processing.

f.   **Data on Diskettes**

If a Clearinghouse encounters a problem in transmitting its data via telephone, the data may be submitted on a DOS-formatted diskette. The resumes should still be keyed in the same format. The diskette—either 5¼" or 3½"—should be properly labelled as to the Clearinghouse, shipping date, and contents and mailed using a mailing folder especially made for diskettes. Transmission of data diskettes is only for emergency situations and should not be done on a regular basis.

g.   **Retention of Data**

Clearinghouses should retain copies of the transmitted files containing RIE/CIJE resumes until the resumes appear in RIE and/or CIJE—approximately three months after transmission. Because data can become garbled in transmission or can be lost, sometimes the Facility must request that data be retransmitted. Failure to retain the files might require a Clearinghouse to reconstruct or rekey the data.

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E. ERIC Digests: Preparation of Digest Full-Text Data

ERIC Clearinghouses annually produce approximately 160 ERIC Digests. Typically, these Digests are brief, two-page discussions of "hot" topics in the field of education. Digests have been published in printed form for many years, and now (through 1991) number more than 1200. Digests have been regularly processed and announced in RIE. Beginning in 1988, the full-text, i.e., the entire contents, of Digests has been made available to users via the online vendors. (That is, a searcher can retrieve not only the citation for the Digest, but can also print out the actual text of the Digest itself.)

Prior to 1991, Digest full-text data were submitted in computerized format by the Clearinghouses on a non-systematic basis. Beginning with 1991, the full-text of all ERIC Digests is transmitted by the Clearinghouses at the same time as the corresponding resume is transmitted for RIE. The full-text records are retained as a separate file (the "EDO" file) at the ERIC Facility and made available on demand to tape subscribers. (Because the ERIC Digests tend to be published in clumps, generally near the end of year, the Digest full-text updates are currently being done on an annual basis. If the publication of ERIC Digests become more regularly spaced throughout the year, the full-text updates may be done on a more frequent basis.)

Unlike longer, more substantive Clearinghouse monographs, that may be produced using standard typesetting or commercial photocomposition methods, Digests are often produced using desktop word processing software that permits the Digest data to be easily converted to a format that can be added to the ED portion of the ERIC database. Therefore, the instructions that follow presume the existence of the full-text of the Digest in a computerized form which can be easily converted. All ERIC Digests are normally to be made available as full-text records. In instances where the word processing data cannot be converted, the full-text record may have to be created by re-keying. If an optical scanner is available, a printed copy may be scanned and the resultant text used for the full-text data.

1. Data Input Requirements

The Digest full-text input must be in ASCII format and prepared according to the same instructions that the Clearinghouses use for their RIE/CIJE input (see EPM Section IX.C).

2. Format

Because the full-text of a Digest is appended to its corresponding resume record on the ERIC Master File, only the actual narrative content of the Digest comprises the full-text. In other words, data such as the Title, Author, Publication Date, etc., are not made part of the full-text record because they are *already there* in field-by-field form in the resume part of the record. (See Figures IX-6(A-B) for an example of a published Digest and an example of the full-text data for that same Digest.)

Each full-text record *must* at a minimum contain the following field tags (Keywords): CH_ and TEXT_. Most records will also need to use the keyword "REFS_" to introduce the References section. The infrequent Digest containing structured tables may need to use the TABLE_ keyword. *No other field tags are to be used for Digests.*

a. Accession Number (CH_)

> **Example:** CH_CE123456

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This field identifies the beginning of a record and *must* be present. As with RIE/CIJE data, the number is entered without blank spaces. This Clearinghouse Accession Number must correspond with the Clearinghouse Accession Number used for the Digest's resume in RIE.

NOTE: In the rare instance of a full-text record not transmitted concurrently with its RIE record, but transmitted *after* the record has been processed with an ED Number, then the entry should begin with:

> ACC_ED123456

and the Accession Number of the Clearinghouse should be omitted.

b.   **Full-Text of the Digest (TEXT_)**

The text of the Digest must be identified by the field tag "TEXT_". The text should correspond exactly to that found in the published Digest (i.e., don't abridge and don't expand). However, minor corrections to faulty text in the published version can be made.

The text should appear essentially as it looks on the original, while still staying within the limitations imposed by ASCII characters, that is, bold, italics, underlining, bullets, tabs, commands to the printer, etc., that cannot be represented on the ERIC file, must be converted or eliminated. The following rules should provide the necessary guidance:

● *Margins*

Left margin must be at position 1 (as with RIE/CIJE data). If original Digest has different margins, they must be changed.

● *Headers*

Place headers on separate lines. Key headers in all uppercase. Use standard indention (minimum 5 spaces), but do not use the tab key to indent; if two lines are needed for a header, indent the second line as well. If a header is used as the first line of a full-text record, it should be in all uppercase, immediately after the TEXT_ keyword.

● *Line Spacing*

Use single-space only between paragraphs, lists, etc.

● *Paragraph Indentions*

Each new paragraph must begin with at least a five-space indention; do not use the Tab key. Without the indentions, the text would be run-on.

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- *Line Returns*

  Each line must be ended with a "Hard Return." Do *not* use the "Wrap" or "Soft Return" feature.

- *Right Justification*

  Right justification, used perhaps to produce an even margin in a published form, must be removed.

- *Bullets*

  Convert bullets to asterisks, hyphens, or numbers. Lists may be indented, if that will make them easier to read, even if they were not indented in the original.

- *Underlining and Italics*

  The underline character and italics may not be used in Digest text. Any underlining and italics used in the published version must be converted to quotation marks. (Underlining also may not be used to indicate the repeat of an author in the bibliography section (REFS field) or to separate data within the Digest.)

- *Desktop Publishing Commands*

  All desktop commands—tabs, printer commands, etc.—must be removed. The accent mark used for the left single-quote must be changed to an apostrophe, since the accent mark is not a valid ERIC character.

- *Charts, Tables, Graphs, etc.*

  Charts and tables containing alphabetic and/or numeric text in columns may be entered in a separate field "TABLE_", at the end of the Digest record. Vertical lines, horizontal lines, etc., which may have appeared in the print version, must be removed. Spaces between columns of numbers must be represented by blanks. As with regular RIE/CIJE data, superscripts, subscripts, underscores, etc., must be removed or converted.

  Specialized graphs (bar, pie, line, etc.) cannot be handled by this technique and must be converted to paragraph form or otherwise summarized in the text.

- *Forced Lines, Left Justified*

  If a new line, left justified, is desired, e.g., a list, an address, etc., portions of which are to be on separate lines, a special character, "@@" must be inserted at position 1 just before the start of the data, to identify the need for a new line.

```
Example:   @@ERIC Processing and Reference Facility
           @@1301 Piccard Drive, Suite 300
           @@Rockville, MD 20850-4305
           @@Send self-addressed envelope...
```

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The EDO program will force a new line whenever the "@@" appears. Without the @@ symbol, the line might read:

> Example: ERIC Processing and Reference
> Facility 1301 Piccard Drive, Suite
> 300 Rockville, MD 20850-4305 Send
> self-addressed envelope...

c.   **References/Citations (REFS_)**

Because certain large Digests in their entirety exceed field size limitations for the TEXT field, it is necessary that trailing "References," "Bibliography," "Additional Readings," "For Further Reading," etc., be identified by the separate field tag REFS_. Data in this field will be appended to the end of the TEXT field on tapes going to vendors. In addition, since Clearinghouses use different bibliographic citation styles, data in the REFS field will *not* be processed in the same way by the computer as it is in the full-text record. For example, titles which are uppercased in the bibliographic citation and indented will not be processed as the headers are in the full-text, i.e., centered, but will remain as entered.

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ERIC DIGEST No. 102

EDO-CE-90-102

Clearinghouse on Adult, Career, and Vocational Education

LOCATING AND SELECTING INFORMATION:
A GUIDE FOR ADULT EDUCATORS

The term information society has become a cliche but the fact of the matter is we are living in an age in which we are bombarded with information. In his book Information Anxiety, Richard Wurman (1989) accurately describes how many of us feel when surrounded with vast amounts of data that do not provide the required knowledge. According to Wurman, the following situations are likely to produce information anxiety: not understanding information, feeling overwhelmed by the amount of information to be understood, not knowing if certain information exists, not knowing where to find information, and knowing exactly where to find information but not having the key to access it (ibid., p. 44).

No matter what their role, knowing how to identify, select, and evaluate information resources are important processes for adult educators. They need to be aware of a wide range of possible resources. In addition, they must be able to sift through and evaluate their relevance. This ERIC Digest describes where adult educators can find information resources and suggests strategies for accessing information. It ends with some guidelines for selecting the most appropriate information.

Information Sources for Adult Educators

Two of the main sources of information related to adult education are information databases and clearinghouses or resource centers. Libraries--particularly college and university libraries located at institutions with graduate programs in adult and continuing education--are also sources of adult education information, but they will not be discussed here. Individuals can inquire at their local libraries about the availability of specific resources, for example, online databases or books.

Information Databases

Information databases store collections of related information that can be retrieved via computer using information retrieval software. When stored, the materials have usually been indexed or classified using a vocabulary control device, i.e., a thesaurus, a list of subject headings, or a specialized classification scheme, to facilitate their retrieval. This controlled vocabulary is used to retrieve information from a database (Niemi and Imel 1987).

A large number of existing databases contain information useful to adult educators. Two comprehensive references that can be used in selecting the most appropriate database are the *Encyclopedia of Information Systems and Services, 10th Edition* (1990) and *Datapro Directory of On-Line Services* (1990). Both provide information about a variety of online databases and are available at many libraries.

The Educational Resources Information Center (ERIC) database is considered to be the primary source for adult education due both to its purpose and its history of service to the field. ERIC has been collecting and classifying all types of

educational materials since 1966. Its focus is on fugitive materials (those that are not otherwise readily available) such as pamphlets, conference proceedings and papers, curriculum materials, research studies, and reports of government-funded projects. More than 700 education-related journals, including all major adult education journals published both in the United States and abroad, are scanned regularly to select articles for inclusion in the database (Imel 1989; Niemi and Imel 1987). Over 14,000 items indexed with the term adult education have been included in the ERIC database since 1966.

The availability of microcomputers and the packaging of the ERIC database in CD-ROM (compact disk-read only memory) format make ERIC more accessible to the general public. Many individuals are choosing to search ERIC without the assistance of a professional searcher using microcomputers or CD-ROM equipment. A subject search of ERIC results in bibliographic information plus an abstract of all information in the ERIC database on the topic (Imel 1989).

Clearinghouses and Resource Centers

Several clearinghouses and resource centers disseminate information about adult education to a variety of audiences including administrators, teachers, researchers, students, and the general public. Some of these organizations, such as the ERIC Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) are national in scope. Others, such as AdvancE (Pennsylvania's adult education resource center and clearinghouse), are state-level organizations. Some of the functions provided by clearinghouses and resource centers include searches of information databases, information about resources, collections of materials, and referral to other agencies and organizations serving adult learners. Many also develop and make available newsletters and free and inexpensive materials related to adult education resources. *The Directory of National Clearinghouses: Resource Centers and Clearinghouses Serving Adult Educators and Learners* (1990) provides information about national clearinghouses and resource centers.

Strategies for Accessing Resources

Knowing where resources are located is one piece of the information puzzle, but this knowledge is best used in combination with some strategies to begin helping you access the most appropriate resources. Such questions as How much information do you need?, How much do you already know about the topic?, How much time and money do you have to devote to this task?, and How do you plan to use the information? can assist in selecting the best strategy to begin your information search.

Two common strategies used to identify information resources include asking other people and searching information databases. Sometimes the best place to begin a search is by getting

FIGURE IX-6(A): Published ERIC Digest

in touch with someone who is familiar with the area. This strategy may be particularly useful if you know little or nothing about the topic. Most adult educators are more than happy to share information about their work, including key information sources. Adult education resource center and clearinghouse personnel are frequently able to help you identify information sources. These individuals work with adult education information resources on a daily basis and are knowledgeable about new materials. They may be able to refer you to other sources of information as well.

A second strategy for locating information is by searching information databases. Most information databases can be accessed both manually and by computer, and many are available in CD-ROM format.

Manual searching. Manual searching refers to the process of using print indexes or catalogs to identify resources. Although not as efficient as computer searching, it may be more effective, especially if you only need a small amount of material or if you are unfamiliar with the topic. A manual search permits the luxury of browsing that the cost of computer searching prohibits. The tradeoff, however, is the cost of the time devoted to the task. Another drawback to manual searching is the fact that you can only search under one subject heading at a time.

Computer searching. Computer searching can be both efficient and effective, provided you know what you are looking for. Computer searching is the most efficient means of retrieving a large amount of information on a topic because it allows you to combine two or more subjects. It can also permit you to limit your search to certain types of material such as research, project descriptions, and curricula. If you have not sufficiently focused your topic, however, it can result in irrelevant material. If you are unfamiliar with the database you wish to search, it is best to consult a professional searcher before attempting a search.

CD-ROM searching. Searching using CD-ROM combines many of the best features of both manual and computer searching. Because there are no online charges being incurred, it can provide the luxury of browsing at the same time it provides the efficiency of computer searching. Because of the time needed to print out citations, CD-ROM is not the best medium for large searches. Also, the demands placed on many CD-ROM stations available to the public may mean limited access.

Selecting Information Sources

Selecting potential sources of information once they have been identified is another step in process. How selective you wish to be may depend on a number of factors such as the amount of material uncovered in your search, the use to which you intend to put the information, and the availability of the sources.

Barrows (1987) suggests weighing the advantages and disadvantages of each source in terms of the following:

- **Availability.** Is the source obtainable?
- **Accessibility.** How easy is it to acquire the source?
- **Time.** How long will it take to get it?
- **Effort.** How much trouble will it be to get it?
- **Cost.** How much will it cost?

Although important in terms of the feasibility of acquiring resources, these criteria have nothing to do with evaluating the substantive nature of the resource. The following guidelines can be used to evaluate and select resources based on their content:

- **Authority of source.** Is the author an established leader in the field? Is it published by an organization that is known for contributing to the field?
- **Timeliness.** Is the information current and up to date? Is it based on current references?
- **Relevance.** Does the source deal with the topic in a contemporary manner? Does the source contain the type of information you need?
- **Depth.** Is the topic treated in sufficient detail to be of use?
- **Accuracy.** Based on what you already know about the topic, is the information correct and reliable?
- **Replicability.** If you are planning to use the material for the purpose of replication, does the source contain information that can be used in other settings?

These criteria should be considered guidelines, not hard and fast rules, when selecting sources. Depending on how you will be using the information, some may be more important than others. For example, if a source meets all the other criteria, the fact that you are unfamiliar with the author or the producer may be irrelevant.

References

Barrows, H. S. "Learning Management in the Context of Small Group Problem-Based Learning." In *Learning Management: Emerging Directions for Learning to Learn in the Workplace.* Information Series no. 320, edited by M. Cheren. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1987. (ERIC Document Reproduction Service No. ED 290 930).

Clearinghouse on Adult Education and Literacy. *Directory of National Clearinghouses: Resource Centers and Clearinghouses Serving Adult Educators and Learners.* Washington, DC: CAEL, Division of Adult Education and Literacy, U.S. Department of Education, August 1990.

Datapro Directory of On-Line Services. Delray, NJ: Datapro Research Corporation, 1990.

Encyclopedia of Information Systems and Services, 10th Edition. Detroit: Gale Research Corporation, 1990.

Imel, S. "The Field's Literature and Information Sources." In *Handbook of Adult and Continuing Education,* edited by S. B. Merriam and P. M. Cunningham. San Francisco: Jossey-Bass, 1989.

Niemi, J. A., and Imel, S. "Information Retrieval." In *Materials and Methods in Adult and Continuing Education,* edited by C. Klevins. Los Angeles: Klevens Publications, 1987.

Wurman, R. *Information Anxiety.* New York: Doubleday, 1989.

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Telephone (614) 292-4353 or (800) 848-4815

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SAMPLE OF DIGEST
FULL-TEXT KEYED FOR EDO FILE

CH_CE123456
TEXT_The term "information society" has become a cliche but the
fact of the matter is we are living in an age in which we are
bombarded with information. In his book INFORMATION ANXIETY,
Richard Wurman (1989) accurately describes how many of us feel
when surrounded with vast amounts of data that do not provide the
required knowledge. According to Wurman, the following
situations are likely to produce information anxiety: not
understanding information, feeling overwhelmed by the amount of
information to be understood, not knowing if certain information
exists, not knowing where to find information, and knowing
exactly where to find information but not having the key to
access it (ibid., p. 44).

No matter what their role, knowing how to identify, select,
and evaluate information resources are important processes for
adult educators. They need to be aware of a wide range of
possible resources. In addition, they must be able to sift
through and evaluate their relevance. This ERIC Digest describes
where adult educators can find information resources and suggests
strategies for accessing information. It ends with some
guidelines for selecting the most appropriate information.

INFORMATION SOURCES FOR ADULT EDUCATORS
Two of the main sources of information related to adult
education are information databases and clearinghouses or
resource centers. Libraries--particularly college and university
libraries located at institutions with graduate programs in adult
and continuing education--are also sources of adult education
information, but they will not be discussed here. Individuals
can inquire at their local libraries about the availability of
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@@Information Databases
Information databases store collections of related
information that can be retrieved via computer using information
retrieval software. When stored, the materials have usually been
indexed or classified using a vocabulary control device, i.e., a
thesaurus, a list of subject headings, or a specialized
classification scheme, to facilitate their retrieval. This
controlled vocabulary is used to retrieve information from a
database (Niemi and Imel 1987).

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useful to adult educators. Two comprehensive references that can
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is considered to be the primary source for adult education due
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ERIC has been collecting and classifying all types of educational
materials since 1966. Its focus is on fugitive materials (those
that are not otherwise readily available) such as pamphlets,
conference proceedings and papers, curriculum materials, research

FIGURE IX-6(B): Sample of Digest Full-Text Keyed for EDO Files

studies, and reports of government-funded projects. More than 700 education-related journals, including all major adult education journals published both in the United States and abroad, are scanned regularly to select articles for inclusion in the database (Imel 1989; Niemi and Imel 1987). Over 14,000 items indexed with the term "adult education" have been included in the ERIC database since 1966.

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Knowing where resources are located is one piece of the information puzzle, but this knowledge is best used in combination with some strategies to begin helping you access the most appropriate resources. Such questions as How much information do you need?, How much do you already know about the topic?, How much time and money do you have to devote to this task?, and How do you plan to use the information? can assist in selecting the best strategy to begin your information search.

Two common strategies used to identify information resources include asking other people and searching information databases. Sometimes the best place to begin a search is by getting in touch with someone who is familiar with the area. This strategy may be particularly useful if you know little or nothing about the topic. Most adult educators are more than happy to share information about their work, including key information sources. Adult education resource center and clearinghouse personnel are frequently able to help you identify information sources. These individuals work with adult education information resources on a daily basis and are knowledgeable about new materials. They may be able to refer you to other sources of information as well.

A second strategy for locating information is by searching information databases. Most information databases can be accessed both manually and by computer, and many are available in CD-ROM format.

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SELECTING INFORMATION SOURCES

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@@2. Timeliness. Is the information current and up to date? Is it based on current references?
@@3. Relevance. Does the source deal with the topic in a contemporary manner? Does the source contain the type of information you need?
@@4. Depth. Is the topic treated in sufficient detail to be of use?
@@5. Accuracy. Based on what you already know about the topic, is the information correct and reliable?
@@6. Replicability. If you are planning to use the material for the purpose of replication, does the source contain information that can be used in other settings?

42

These criteria should be considered guidelines, not hard and fast rules, when selecting sources. Depending on how you will be using the information, some may be more important than others. For example, if a source meets all the other criteria, the fact that you are unfamiliar with the author or the producer may be irrelevant.

REFS_REFERENCES

Barrows, H. S. "Learning Management in the Context of Small Group Problem-Based Learning." In Learning Management: Emerging Directions for Learning To Learn in the Workplace. Information Series No. 320, edited by M. Cheren. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1987. (ERIC Document Reproduction Service No. ED 290 930).

Clearinghouse on Adult Education and Literacy. Directory of National Clearinghouses: Resource Centers and Clearinghouses Serving Adult Educators and Learners. Washington, DC: CAEL, Division of Adult Education and Literacy, U.S. Department of Education, August 1990.

Datapro Directory of On-Line Services. Delray, NJ: Datapro Research Corporation, 1990.

Encyclopedia of Information Systems and Services, 10th Edition. Detroit: Gale Research Corporation, 1990.

Imel, S. "The Field's Literature and Information Sources." In Handbook of Adult and Continuing Education, edited by S. B. Merriam and P. M. Cunningham. San Francisco: Jossey-Bass, 1989.

Niemi, J. A., and Imel, S. "Information Retrieval." In Materials and Methods in Adult and Continuing Education, edited by C. Klevins. Los Angeles: Klevens Publications, 1987.

Wurman, R. Information Anxiety. New York: Doubleday, 1989.

This ERIC Digest was developed in 1990 by Susan Imel with funding from the Office of Educational Research and Improvement, U.S. Department of Education under Contract No. RI88062005. The opinions expressed in this report do not necessarily reflect the position or policies of OERI or the Department of Education. Digests are in the public domain and may be freely reproduced.

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Do *not* use REFS_ more than once in a record, as the second occurrence will overlay the first use. If the Digest contains other sections, such as "Resources," in addition to a References Section, the header for the additional section should be processed as part of the REFS_ section, as in the example below:

```
Example:   REFS_REFERENCES
                Adams, B. New Educational Ideas...,
           Washington, DC. 1990.
                Smith, W. Education Is a Good Thing;
           Harcourt Brace, New York, NY. 1991.
                ----
           @@RESOURCES
                Office of Educational Research and
           Improvement (ED), What Works, Washington, DC.
           1989.
                Wisconsin Educational Research Center,
           Education Programs, Madison, WI. 1991.
```

The following rules pertain to the REFS_ section:

- *Header* - Key in all uppercase.

- *Citation* - Each citation should begin on a separate line, indented 5 spaces, with succeeding lines left justified.

- *Style/Format* - Within a given Digest, citations should be in a *consistent style* as to spacing, upper casing of titles, spacing of initials, etc. For readability, the entire title should not be in all uppercase. ED Numbers should always be cited with "ED" before the number and not as "ERIC Document Number 300 000."

Disclaimer data and other concluding information, such as Digest author information, should be keyed at the end of the References section.

3. **Conversion of Digest Text (That Has Been Word Processed) to ASCII Format**

Since the full-text of most Digests has been produced using various word processing systems (such as WordPerfect), that same data can be used for transmission of the Digest to the Facility, provided it is: (1) properly converted to ASCII; and, (2) modified to meet the specifications discussed above.

Conversion-to-ASCII procedures are generally available on most word processing systems. After completing the conversion, but before attempting to transmit the data online (or on a diskette) to the Facility, the Clearinghouse should check the entire record to ensure that no extraneous word processing characters still exist. Pay particular attention to the proper conversion of hyphens and bullets. Delete extra spaces. Be certain that line length does not exceed 80 characters (75 preferred)—if the data were prepared using desktop settings (which are typically in inches), the printed data will fit on the page, but in actuality may exceed the 80 characters limit.

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One way to determine whether all word processing characters (underlining, special formatting symbols such as centering, fonts, etc.) have been removed is to call up the file using DOS commands for "Type" or "Print," as follows:

```
EXAMPLE:                    If DOS is on the C Drive:

Key    C>Type filexyz            then press the Enter
                                 key

                    OR

Key    C>Print filexyz      then press the Enter key

EXAMPLE:                    If DOS is on the A Drive

Key    A>Type filexyz            then press the Enter
                                 key

                    OR

Key    A>Print filexyz      then press the Enter key
```

A text that is improperly converted, that contains numerous invalid characters and hyphens at the end of the lines, and that has improper line lengths may not be processed by the Facility, and the Clearinghouse may be asked to rework and retransmit the data.

4.   **Transmission of Full-Text**

The full-text Digest record should be transmitted online along with the weekly RIE/CIJE data. If online transmission is not possible for any reason, the records may be placed on an IBM-compatible 5-1/4" or 3-1/2" diskette (data in ASCII format) and shipped to the Facility, separately or with the regular shipment of documents. Online transmission of each separate file should be preceded by a short message announcing "Digest Full-Text (3 items)." Do *not* append the full-text of the Digest to the resume data intended for RIE. Keep the data for the two files separate.

If a diskette is mailed, the records should be processed in numeric order by accession number and entered as *one* file. For example, three Digests by CG might all be on the diskette as one file called "CGDIG501." When file CGDIG501 is called up on the computer at the Facility, the full-text of the three Digests will then all be under that one file name. Do not list each Digest individually.

Diskettes may be enclosed with the regular document shipment; however, the diskette should be placed in a mailing holder designed for protecting diskettes. The diskette as well as its mailing holder should be labelled with the Clearinghouse name, EDO, and the date of shipment. The label for the diskette should be affixed to it; i.e., do not put the label on the diskette's envelope and leave the diskette itself unlabelled. (As an added precaution, the existence of a diskette should be noted on the logsheet.)

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Insofar as possible, Digests should be processed regularly throughout the year so that an even flow can be maintained.

5. **Shipment of ERIC Digests for EDO File**

A copy of the printed version of an ERIC Digest should be shipped the same week as the full-text record is transmitted for the EDO file. This EDO-related copy is in addition to the one shipped for routine processing in RIE. The printed version is used by the editors at the Facility to proof the full-text to ensure that no data have been lost in transmission. Do *not* ship merely a copy of the raw data (a listing of the file printed after conversion of data).

The printed version of the Digest should be prepared and shipped for the EDO file in the following manner:

- Record the CH Accession Number in the lower left corner of the Digest (in pencil), just as on regular document input.

- Attach a paper copy of the corresponding RIE bibliographic citation for the Digest; this is simply a copy of the resume as transmitted for announcement in RIE. (This helps to ensure accuracy and avoid errors.)

- Prepare a separate standard ERIC Clearinghouse Log Sheet as a "shipping list" for this Digest or group of Digests. (See Figure-IX-7 for an example.)

- Enter the date of transmission of the full-text record on the log sheet line "Bibliographic Data Transmitted."

- In the "Comments" section of the Log Sheet, enter "Full-Text Digests"; if a diskette accompanies the shipment, add a helpful notation in the same section, e.g., "Diskette Enclosed."

- Ship the Log Sheet, Published Digest(s), and paper copy of the resume(s) to the Facility in the same week as the corresponding RIE document is shipped and the Digest full-text is transmitted.

F. Acquisitions Data Report (ADR)

1. Introduction

The Acquisitions Data Report (ADR) is a file of document titles representing recent acquisitions that are "in process" at the Clearinghouses. The file is for RIE data only. Documents may be at virtually any stage of the processing cycle: evaluation, selection, reproduction release, accessioning, cataloging, indexing, abstracting, document preparation (for filming), etc. The minimum requirement is that they must have been assigned a Clearinghouse Accession Number, since that is their basic identifying "tag" in the ADR system.

The purpose of the ADR is to provide a mechanism by means of which the geographically dispersed ERIC Clearinghouses can become aware of what documents are currently being worked on throughout the system by all Clearinghouses combined, in order to avoid duplicate processing. (The use of the ADR for duplicate checking is discussed in Section II, "Acquisitions," of this Manual.)

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DATA ENTRY

ERIC | Clearinghouse Accession Log Sheet   Page __1__ of __1__

CLEARINGHOUSE (CIRCLE ONE) (CE) CG CS EA EC FL HE IR JC PS RC SE SO SP TM UD

DATE(S): DOCUMENTS SHIPPED ____9-5-91____ BIBLIOGRAPHIC DATA TRANSMITTED _____

RECEIVED AT FACILITY _____ ONLINE DATASET NAME _____

SHIPMENT APPROVED BY _____

ACCESSION NUMBER		LOG/ DOC CHECK	DOCUMENT IDENTIFICATION (Author-Last Name or Title-One or Two Words)	LEVEL (1,2 or 3)	COMMENTS
PREFIX	NUMBER				
1 CE	123456		Information for		Full-text Digests
2 CE	123457		Adult Education		
3 CE	123458		Career Education		
4					
5					
6					
7					
8					
9					
10			SAMPLE LOG SHEET		
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

TOTAL ITEMS IN SHIPMENT : _____

SHIPMENT INTENDED FOR: JOURNAL (CIRCLE ONE): **RIE**   **CIJE**

ISSUE MONTH (CIRCLE ONE): J F M A M J J A S O N D

WEEK OF INPUT (CIRCLE ONE): 1   2   3   4   5

SOURCE JOURNAL CITATION INFORMATION (CIJE INPUT ONLY): _____

EFF-38 (8/90)   **FIGURE IX-7: ERIC Clearinghouse Accession Log Sheet (For Digests For EDO File)**

Access to the data in the ADR is available to Clearinghouses and other ERIC components in two ways:

- An internal online file housed on a microcomputer at the ERIC Facility; and

- A printed publication issued monthly by the Facility reflecting the data entered on the online file during the prior six-month period.

The online ADR is a real-time online system. Clearinghouses are able to interrogate and update the file daily, weekly, or monthly, as they choose. The online ADR file is resident on a microcomputer at the ERIC Facility. This microcomputer is kept operating 24 hours a day, 7 days a week, so that it can be dialed into by any ERIC Clearinghouse or other component at any time. Clearinghouses can interrogate the file for individual titles and can add individual titles to the file, both in real time. Clearinghouses can also choose to add a batch of titles to the ADR. When the batch update option is selected, the update process actually takes place during the upcoming evening hours and the report on potential duplicates in the batch becomes available the next day. The Clearinghouses can dial up to obtain these reports on their batch input any time at least one night after they have input a batch.

The online file contains all data submitted to it during the preceding twelve months. For example, when the input for January 1993 is received, the entries added in January 1992 drop off. NOTE: Titles do *not* drop out automatically when they are announced in RIE.

On the first working day of each month, all entries added to the online file during the previous month are copied and transmitted to a mainframe computer which houses the ERIC computer system. A printed version of the ADR is then produced by this program; every published version reflects a six-month running cumulation (e.g.: January-June, February-July, March-August, etc.) although, as with the online version, a year's worth of data is retained on the file for duplicate processing purposes.

Copies of the printed version are sent to each Clearinghouse along with exception reports specific to each Clearinghouse. These "Clearinghouse Activity/Exception Reports" list alphabetically by title all newly added records for the month, records flagged as first time potential duplicates, records changed, records dropped (the routine monthly drops), and records purged by request. The printed ADR may be used for duplicate checking when staff at the Clearinghouse do not wish to go online to look up a title. The exception reports provide a double-check of the data that were entered online during the preceding month.

2. Clearinghouse Accessioning

Although the procedures for accessioning are discussed elsewhere in this Manual (see Section II), basic information is provided here to create a context for the discussion of data entry to the ADR.

Every document entering the ED portion of the ERIC database has a unique Clearinghouse Accession Number assigned to it that will identify that document as it is being processed for RIE. Normally this number is assigned to the document after it has been selected for entry into the database. Using either a paper ADR Input Form provided by the ERIC Facility or a list on a computer, a Clearinghouse records a Clearinghouse Accession Number and enters with each number a document title and related information. (See Figure IX-8 for an example.) At that time, the number is physically added to the printed document as well. In order to avoid using a number more than once, a Clearinghouse must maintain a log or list in order by Accession Number.

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Periodically (daily, weekly, biweekly, or monthly) these Accession entries are transmitted to the ERIC Facility either: (a) by sending a "batch" file containing all of the new entries; or (b) by entering each entry individually while online. Whichever method is chosen, all entries must contain the information indicated below:

- **Clearinghouse Accession Number** - eight spaces: 2 alpha (CH prefix) followed by six numeric.

- **Pagination** - Number of pages in the document - four spaces allowed. The figure can be the last numbered page of the document and need not be an exact count. Pagination is intended to provide a way to distinguish between documents with the same or similar titles. If the pagination cannot be determined or estimated easily, then an "NP" (right justified) may be entered.

- **Publication Date** - Date document was produced - seven spaces allotted (DDMMMYY). If the publication date cannot be determined or estimated from internal evidence, then an "ND" (right justified) may be entered.

- **Disposition** - Enter one of three codes to indicate status of processing for the title (one space allotted):

  1 - Selected for RIE, ready for immediate processing.

  2 - Selected for RIE, on hold awaiting release, legible copy, etc.

  3 - Selected for RIE, but for various reasons processing could not be completed.
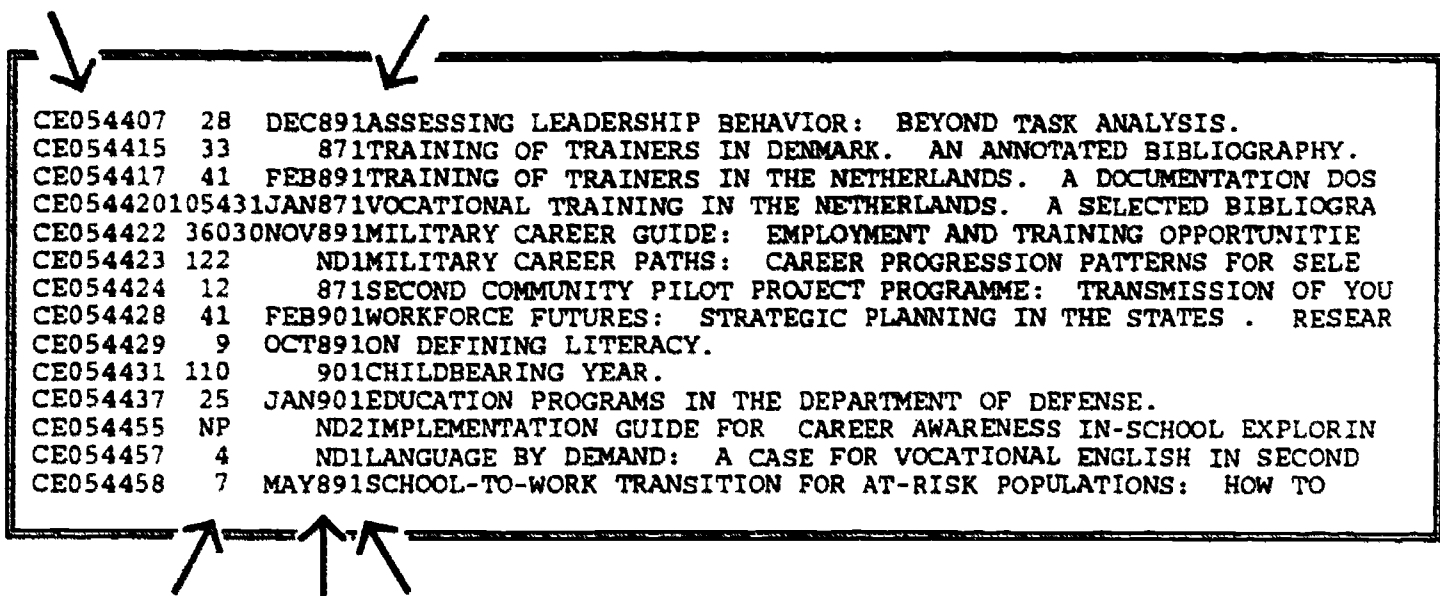
  Completion of this field is *mandatory*. Rejects or items retained solely for local files should not be reported.

4ʒ

- Title - The title is recorded as it appears on the document including initial articles except for initial punctuation marks. Sixty spaces are allocated for the title. Use only one space after periods, commas, colons, etc. Use all 60 spaces if needed. If the title exceeds 60 spaces, use all of the spaces anyway; this will mean that some titles will be truncated. Do not use ellipses "..."

CLEARINGHOUSE NUMBER

TITLE

```
CE054407  28   DEC891ASSESSING LEADERSHIP BEHAVIOR:  BEYOND TASK ANALYSIS.
CE054415  33      871TRAINING OF TRAINERS IN DENMARK.  AN ANNOTATED BIBLIOGRAPHY.
CE054417  41   FEB891TRAINING OF TRAINERS IN THE NETHERLANDS.  A DOCUMENTATION DOS
CE054420105431JAN871VOCATIONAL TRAINING IN THE NETHERLANDS.  A SELECTED BIBLIOGRA
CE054422  36030NOV891MILITARY CAREER GUIDE:  EMPLOYMENT AND TRAINING OPPORTUNITIE
CE054423  122     ND1MILITARY CAREER PATHS:  CAREER PROGRESSION PATTERNS FOR SELE
CE054424  12      871SECOND COMMUNITY PILOT PROJECT PROGRAMME:  TRANSMISSION OF YOU
CE054428  41   FEB901WORKFORCE FUTURES:  STRATEGIC PLANNING IN THE STATES .  RESEAR
CE054429   9   OCT891ON DEFINING LITERACY.
CE054431  110     901CHILDBEARING YEAR.
CE054437  25   JAN901EDUCATION PROGRAMS IN THE DEPARTMENT OF DEFENSE.
CE054455  NP      ND2IMPLEMENTATION GUIDE FOR  CAREER AWARENESS IN-SCHOOL EXPLORIN
CE054457   4      ND1LANGUAGE BY DEMAND:  A CASE FOR VOCATIONAL ENGLISH IN SECOND
CE054458   7   MAY891SCHOOL-TO-WORK TRANSITION FOR AT-RISK POPULATIONS:  HOW TO
```

PAGINATION   **DISPOSITION CODE**

DATE

FIGURE IX-8:   Clearinghouse Input to the ADR (Sample Data, with Callouts)

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3.   **ADR Online System**

Information on connecting to the online system, sign-on, sign-off commands, etc. has been provided to each ERIC Component in the *ADR Operating Procedures* issued in 1992 and is, therefore, not duplicated in this Manual.   Only those aspects of the ADR Online relating to the data entry of accessions either interactively or in batch mode are described.

The ADR Online main menu shown below has two options for processing accessions—"ADR Interactive" and "ADR Batch—Transfer Files (Send/Fetch."

```
A D R   O N L I N E   M A I N   M E N U

[1]    ADR Interactive

[2]    ADR Batch-Transfer Files (Send/Fetch)

[3]    GOODBYE
```

a.   **ADR Interactive (Option 1)**

Option 1 brings up the ADR Interactive menu. This system is interactive in the sense that the user may directly edit individual entries, add new records, modify existing records, or query the master file. The various options are explained in the following discussion.

```
                    ADR Interactive Menu
              Database Spans Mar. 1991 to Mar. 1992

[1]    Add new records.
[2]    Modify existing records.
[3]    Query the ADR master file for a specific title.
[4]    Exit.

              (Press number of desired option.)
```

ACTION: Select Option from Screen.
(Summary Explanation of Options Listed Below.)

5İ

	SUMMARY EXPLANATION OF OPTIONS
Option 1	*"Add new records."* This option is used to add individual records to the file, one at a time (i.e., *not* batch mode).
Option 2	*"Modify existing records."* This option is used to change individual records already on the file, or to delete existing records.
Option 3	*"Query the ADR master file for a specific title."* Use this option to scroll up or down through the Master file or to look for a specific title. This is the command you would use to duplicate check a single title in hand.
Option 4	*"Exit".* Select Option 4 to exit the interactive mode and return to the ADR online main menu.

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OPTION 1

```
                    ERIC ADR Database Update
                       ADD NEW RECORDS
               Database Spans Mar. 1991 to Mar. 1992


Title [                                                           ]
Clearinghouse Accession Number [         ]
Page Count [        ]
Publication Date   [        ]
Disposition Code   [  ]


          SAVE          ==> Ctrl S
          NEXT          ==> Ctrl N
        DELETE          ==> Ctrl D
          QUIT          ==> ESC
```

ACTION: Enter the ADR Data Elements into Their Respective Fields

Option 2 is used to add individual titles—in real time, not in batch mode—to the ADR Online.

Fill in all the data in the spaces allotted. The backspace key may be used to correct errors. Be certain to hit CTRL S for SAVE, if you are satisfied with the entry you have created. To insert a character or characters in an existing record, press the "INS" key and then type the character(s) to be inserted. To advance to the next field, press the "down arrow" key.

"Saved" records are added to the ADR Master File. Clearinghouses will probably use this option only occasionally, for example, when a PRIORITY document needs to be processed quickly or when an item has been inadvertently dropped from a batch mode update.

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OPTION 2

```
              ERIC ADR Database Update
              MODIFY EXISTING RECORDS
         Database Spans Mar. 1991 to Mar. 1992


         Please enter the accession number of the record
            you would like to edit and press <ENTER>.

  Clearinghouse Accession Number [            ]

                    Quit ==> ESC
```

ACTION: Enter the Clearinghouse Accession Number to be Modified.

Select *Option 2* to modify an existing record. Use the Clearinghouse Accession number to call up the desired record. To delete a record, press the CTRL and "D" key simultaneously.

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OPTION 3

```
Enter search title:
*******************************TOP OF FILE*********************************
    100 COMMONLY ASKED QUESTIONS ABOUT THE NEW AHERA ASB
                SE050092  61    MAY91 1    8-18-91
    100 NEW PLAY IDENS FOR MONDAY MORNING.
                PS017703  40        92 1   2-28-92
    100 YEARS OF KINDERGARTENS IN FINLAND.
                PS017692  19    FEB91 1    12-13-91
    101 CRITERIA FOR APPRAISING INTERACTIVE VIDEO.   A FUT
                IR013862  2C        90 1   9-18-91

***************************BOTTOM OF FILE*****************************
```

ACTION: **Enter the title of the document you wish to locate in the ADR master file.**

Option 3 permits you to query the ADR for a specific title and to see the desired title in alphabetic context. Enter the title to be searched on the top line. The system will then look up the title keyed.

You may scroll up and down through the data, "browsing" as desired, using "PgDn" and "PgUp" keys, or the up and down arrow keys.

Note that the entries contain all of the data normally found in the printed ADR, but the shorter screen format requires two lines to display it. The title appears on line 1. On line 2 is the Clearinghouse Accession Number, page count, publication date, disposition code, and date added to the ADR, in that order.

OPTION 4 "EXIT"

Option 4 permits the user to EXIT Menu 1 and either go to Menu 2 to transfer batch files or exit the ADR Online system.

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b.   **ADR Batch (Option 2)**

Option 2 (ADR Online Main Menu) permits the user to "SEND" or "FETCH" files of ADR entries to and from the ADR On-line system. Files that are prepared offline and transmitted will be processed by the system overnight, and an exception report will be produced for reviewing the following day. The system will assign this exception report file the same name that was specified when the file was transmitted, plus the extension ".ERR," e.g., "CE040192.ERR". This file can be downloaded to the user's microcomputer, using the "FETCH" command, and printed offline.

(1)   **General Guidelines**

The basic guidelines for sending a batch transmission are:

● The Clearinghouse must have previously prepared a body of ADR data as a machine-readable dataset on its microcomputer. The file must be stored under a file name, and the file name must conform to the following format:

XXMMDDYY

XX= Clearinghouse ID (AA, CE, PS, UD, etc.)
MM= Month (01, 02, etc.)
DD= Day of Month (01, 02, 03, etc.)
YY= Year (92, 93, 94, etc.)

File names not conforming *exactly* to this format will go undetected by the computer program.

Also the date contained in the file name must match the date a file is sent. That is, do not create a file name AA032892 (i.e., March 28, 1992) and transmit it two days later (March 30, 1992) without changing the date. The program uses the date as a pointer for processing the data each night. For example a file marked "AA032892" will be batch processed, along with all other files sent the same day, in the later evening of March 28, 1992—no other files are processed. On March 29, only files with a date of 032992 will be processed, and so forth. If the file doesn't correspond to the date sent, the program will not know to process it.

● The file must be in a known location, i.e., is it in the root directory, the A: directory, or possibly in the subdirectory of the communications package.

● The same rules for format and length of data apply as discussed earlier in F.2, "Clearinghouse Accessioning."

NOTE: All entries must use fixed spacing, one entry per line. Each new entry begins at position 1, sometimes called column 1. All items within an entry must stay within their assigned positions; each item and its position range is listed below:

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Clearinghouse Accession Number - Positions 1-8
Pagination - Positions 9-12; right justified
Publication Date - Positions 13-19; right justified
Disposition - Position 20
Title - Positions 21-80

Do not exceed Position 80.

● If possible, please spell-check ADR batch data before transmission. This is not a rigid requirement, but it helps to avoid title comparison failures.

● Data must be in ASCII code. Each line must end with a hard return.

● Send only one batch of ADR data per Clearinghouse per day (to avoid the second batch overlaying the first).

● Use only PROCOMM or PROCOMM PLUS (PcPlus) to transfer the data.

(2)   **Transferring Files**

To send an ADR data file, select option 2 from the ADR Online menu:

```
          A D R   O N L I N E   M E N U

    [1]    ADR Interactive

    [2]    ADR Batch-Transfer Files (Send/Fetch)

    [3]    GOODBYE
```

SCREEN: Would you like to (S)end or (F)etch files?

YOUR RESPONSE: (S/F): S or (S/F): F

SCREEN: Please start transfer now (PgUp!!)

YOUR RESPONSE: Hit the PgUp key

NOTE: Once the PgUp key has been hit, select the proper file transfer protocol
           Use Y-modem batch.

—PROCOMM users select   — 6;

—PROCOMM PLUS (version 1.1) users select   — 12;

—PROCOM PLUS (version 2.0) users select   — Y.

PROCOMM will ask for the filename. Enter the filename using the format
CHMMDDYY (e.g., AA040792). Always include the complete path to the file.

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FILENAME EXAMPLES: A: CE040792
C: \WP51\PS040792
C: \PCPLUS\DATA\IR040792

A window containing information about the progress of the file transfer should appear. PROCOMM/PROCOMM PLUS will take it from there. If an abort message is received, try to transfer again.

You will automatically be returned to the menu after the completion of the file transfer.

(3) **Fetching Files**

There are two principal reasons for "fetching" a file:

● to make certain that a file that was transmitted was successfully received by the ADR system;

● to review errors and potential duplicates in data transmitted.

(a) **Checking Transmitted Data**

A Clearinghouse may wish to examine a file just sent in order to ensure that all data sent were received. A Clearinghouse may wish to determine what files have been sent during a month in question. If a file is "fetched" the same day it is sent, it is identified by the same characters used by the Clearinghouse to identify it. If it is fetched the following day it is identified with the extension ".TXT".

(b) **Retrieving Clearinghouse Error and Potential Duplicates Reports**

Clearinghouse Error and Potential Duplicates reports are named by attaching the extension ".ERR" to the original Clearinghouse ID, e.g., "CE040792.ERR". They are available the day *after* a batch has been input and are retained on the system for a period of two months.

Data errors detected by the system remain unchanged until corrected by the Clearinghouse. To correct errors or delete records, use Option 2, "Modify Existing Records" on the ADR Interactive menu.

Potential duplicates should be resolved. Duplicates of the Clearinghouse's own input must be resolved on the basis of in-house records. Duplicates of another Clearinghouse's title must be resolved by first determining whether the item has entered the database yet. This can often be done via the *Clearinghouse Number to ED Number Cross-Reference List*. If the item is already in the database, the Clearinghouse with the later duplicate should simply delete its ADR record for the item. If the item is not yet in the database, the two Clearinghouse's should negotiate who is to process the item. If the item has been shipped by both Clearinghouses or if each Clearinghouse believes the item is properly theirs, responsibility for resolving the duplication passes to the Facility. If research reveals that the item in hand is not a true duplicate, then, of course, processing can proceed unimpeded.

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The steps in fetching an Error file are as follows:

```
Step 1:    Select Option 2 on the Main Menu "ADR
           Batch-Transfer Files (Send/Fetch)"

Step 2:    Select the (F)etch option.

Step 3:    Enter the filename of the file to be
           fetched.   You may use DOS "wildcard"
           characters, e.g.,  *  and  ?  for part of
           the file.  Do not use a path or drive
           designator.
```

Filename Examples:

CE040292.ERR   (CE's error file for April 2, 1992)

FL*.ERR   (all of FL's error files. Not recommended.)

IR04*.ERR   (all of IR's April error files)

JC041792.ERR   (all of JC's April error files that were generated between April 10 and
                  April 19)

Do not use *.* or *.ERR or XX*.ERR or XX*.* because these open-ended formats will fetch
too many files.

```
Step 4:    Hit the PgDn key and then select a file
           transfer protocol (y modem batch).

           -PROCOMM users use #6.
           -PROCOMM Plus (version 1.1) users use #12.
           -PROCOMM Plus (version 2.0) user use Y.

           After selecting the protocol, a file transfer
           window will report on the transfer's progress.
           When transfer is complete, you will be
           returned to the menu.
```

c.   **"Goodbye": Leaving the ADR Online (Option 3)**

         The selection of Item 3 "Goodbye" on the main menu exits the user
from the ADR Online and resets the program for the next user.

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4. **ADR Data Transmission**

    a. **Transmission Schedule**

        ADR data should be transmitted periodically throughout a particular month. All Clearinghouses are expected to transmit *at least* monthly to the ADR. If for some reason a Clearinghouse cannot transmit to the ADR Online system for a particular month (e.g.. phone line difficulties, modem needing repair, etc.), the Clearinghouse should contact the Facility's computer department—preferably before the end of the month in question. Arrangements will then be made to receive the data by other means, usually by mailed diskette. Data not sent via the ADR Online system are still expected to be inhouse at the Facility by the last day of the month.

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